

Claims

[c1] What is claimed is:

1. A portable storage device assembled inside a housing of a computer, the computer comprising a storage device fixture comprising at least one fixing hole, the portable storage device comprising:

a storage module;

a bracket for carrying the storage module; and

an elastic structure connected to the bracket comprising at least one stop component on the elastic structure for wedging in the fixing hole on the storage device fixture so as to fix the connection between the portable storage device and the computer;

wherein when the elastic structure is pressed down, the stop component of the elastic structure does not wedge in the fixing hole on the storage device fixture so that the portable storage device can be separated from the computer, and when the elastic structure is not pressed down and is restored to the original location, the stop component of the elastic structure wedges in the fixing hole on the storage device fixture so as to fix the portable storage device inside the computer.

- [c2] 2. The portable storage device of claim 1 wherein the storage device fixture further comprises at least one sliding track, and the bracket comprises at least one sliding plate for sliding on the sliding track.
- [c3] 3. The portable storage device of claim 1 further comprising a plurality of spacers installed between the storage module and the bracket.
- [c4] 4. The portable storage device of claim 3 wherein the spacer is made of conductive rubber material.
- [c5] 5. The portable storage device of claim 1 wherein the bracket further comprises a plurality of cushions installed on one side of the bracket for providing an elastic restoring force to cushion the impact of the portable storage device against the storage device fixture so that the stop component of the elastic structure can wedge in the fixing hole on the storage device fixture smoothly.
- [c6] 6. The portable storage device of claim 1 wherein the bracket comprises a handle for supporting the downward force applied to the elastic structure.
- [c7] 7. The portable storage device of claim 1 wherein the bracket comprises a plurality of diffusing holes for diffusing heat generated by the storage module.

- [c8] 8. The portable storage device of claim 1 wherein the elastic structure is riveted to the bracket.
- [c9] 9. The portable storage device of claim 1 wherein the elastic structure is a stainless steel fragment.
- [c10] 10. The portable storage device of claim 1 wherein the storage module is a hard disk.
- [c11] 11. A computer comprising:
a housing;
a storage device fixture installed inside the housing comprising at least one fixing hole; and
a portable storage device comprising:
a storage module;
a bracket for carrying the storage module; and
an elastic structure connected to the bracket comprising at least one stop component for wedging in the fixing hole on the storage device fixture so as to fix the connection between the portable storage device and the computer;
wherein when the elastic structure is pressed down, the stop component of the elastic structure does not wedge in the fixing hole on the storage device fixture so that the portable storage device can be separated from the computer, and when the elastic structure is not pressed down and is restored to the original location, the stop

component of the elastic structure wedges in the fixing hole on the storage device fixture so as to fix the portable storage device inside the computer.

[c12] 12. The computer of claim 11 wherein the storage device fixture further comprises at least one sliding track, and the bracket comprises at least one sliding plate for sliding on the sliding track.

[c13] 13. The computer of claim 11 wherein the portable storage device further comprises a plurality of spacers installed between the storage module and the bracket.

[c14] 14. The computer of claim 13 wherein the spacer is made of conductive rubber material.

[c15] 15. The computer of claim 11 wherein the bracket further comprises a plurality of cushions installed on one side of the bracket for providing an elastic restoring force to cushion the impact of the portable storage device against the storage device fixture so that the stop component of the elastic structure can wedge in the fixing hole on the storage device fixture smoothly.

[c16] 16. The computer of claim 11 wherein the bracket comprises a handle for supporting the downward force applied to the elastic structure.

- [c17] 17. The computer of claim 11 wherein the bracket comprises a plurality of diffusing holes for diffusing heat generated by the storage module.
- [c18] 18. The computer of claim 11 wherein the elastic structure is riveted to the bracket.
- [c19] 19. The computer of claim 11 wherein the elastic structure is a stainless steel fragment.
- [c20] 20. The computer of claim 11 wherein the storage module is a hard disk.